

CATHODE ARC SOURCE AND GRAPHITE TARGET

ABSTRACT

A cathode arc source has means for generating first and second magnetic fields, of opposite or reverse direction to each other. The resultant magnetic field includes a null point between the target and the substrate, though close to the target. Field strength normal to the target is zero at the null point, and field strength lateral to the target is strong at the target surface, constraining movement of the arc spot and reducing the risk of migration off the target surface. A target is made by pressing graphite powder at elevated temperature and pressure in the absence of binding material. Both source and target contribute to reduced macroparticles in deposited films.